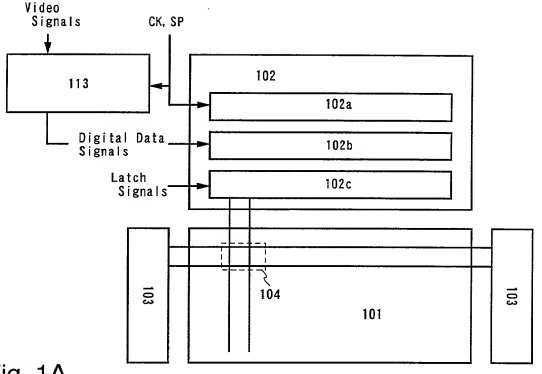

Video Signals
CK, SP
113
102
102a
Digital Data Signals
102b
Latch Signals
102c
103
104
101
103

Fig. 1A

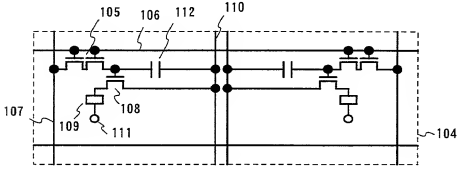

105
106
112
110
107
109
108
111
104

Fig. 1B

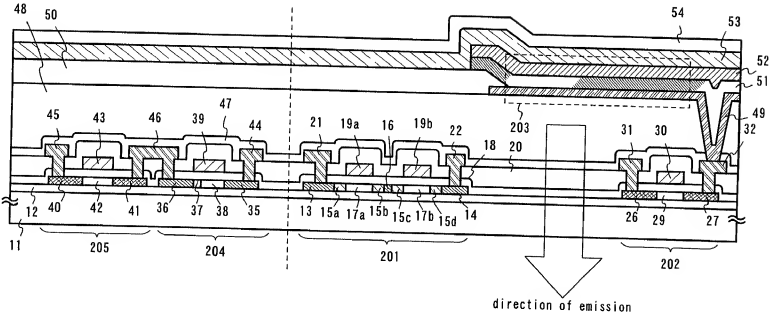


Fig. 2

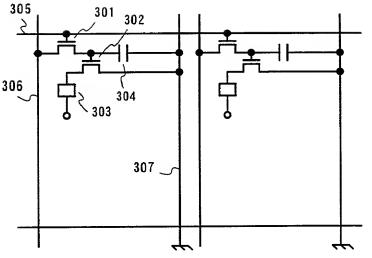


Fig. 3

Fig. 4A

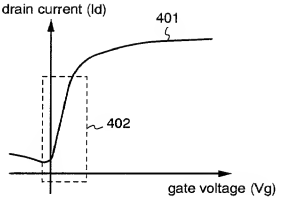

drain current (Id)
401
402
gate voltage (Vg)

Fig. 4B

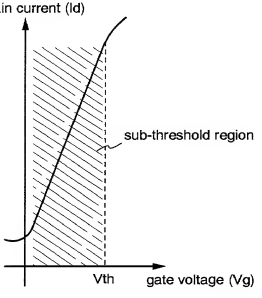

drain current (Id)
sub-threshold region
Vth
gate voltage (Vg)

Fig.5A

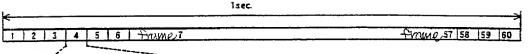


Fig.5B

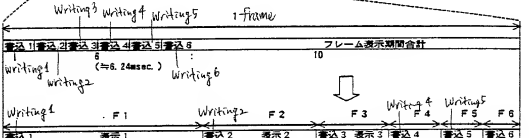


Fig.5C

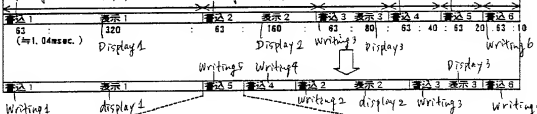


Fig.5D

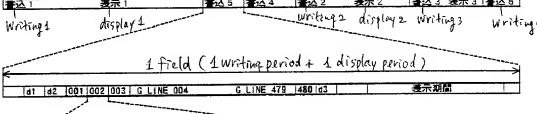


Fig.5E

Fig.5F

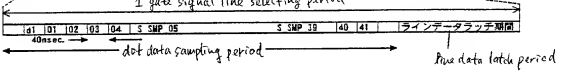
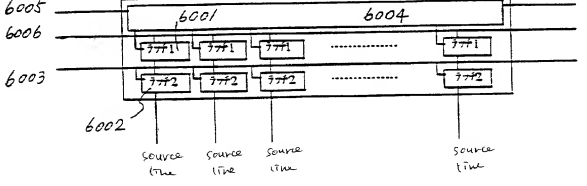


Fig.6



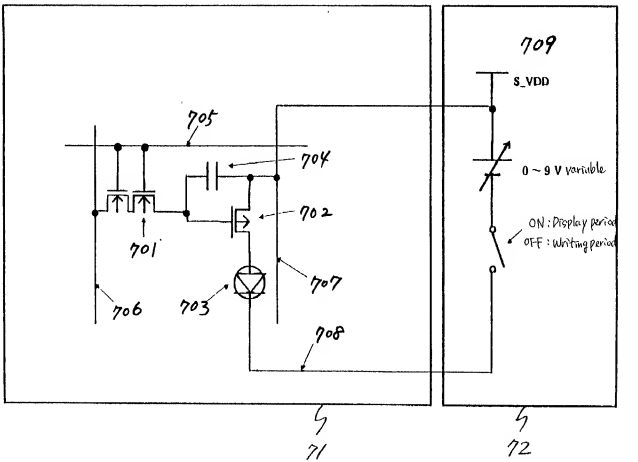


Fig. 7

Fig. 8

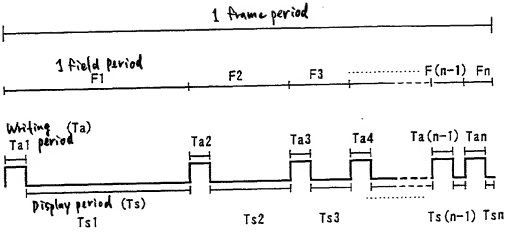
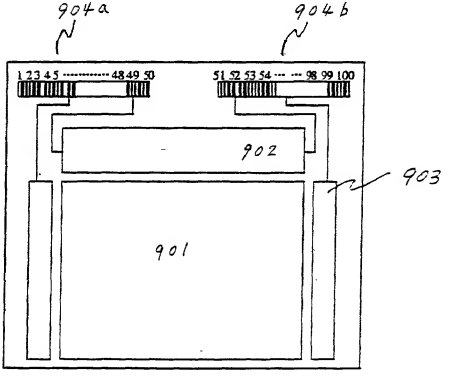
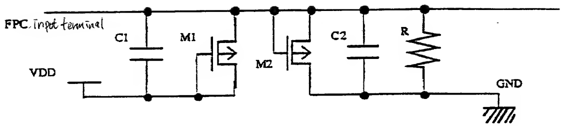

1 frame period
1 field period
F1
F2
F3
F(n-1) Fn
Writing period (Ta)
Ta1
Ta2
Ta3
Ta4
Ta(n-1) Tan
Display period (Ts)
Ts1
Ts2
Ts3
Ts(n-1) Tsn

Fig. 9


904a
904b
1 2 3 4 5 ---- 48 49 50
51 52 53 54 --- 98 99 100
902
903
901



M1,M2 ; L=11W,W=250×2 [μm]
C1,C2 ; S=0.20×0.08 [㎟] (GTa-Al間)
R ; L=673,W=5 [μm] (LDDSi)

Fig.10

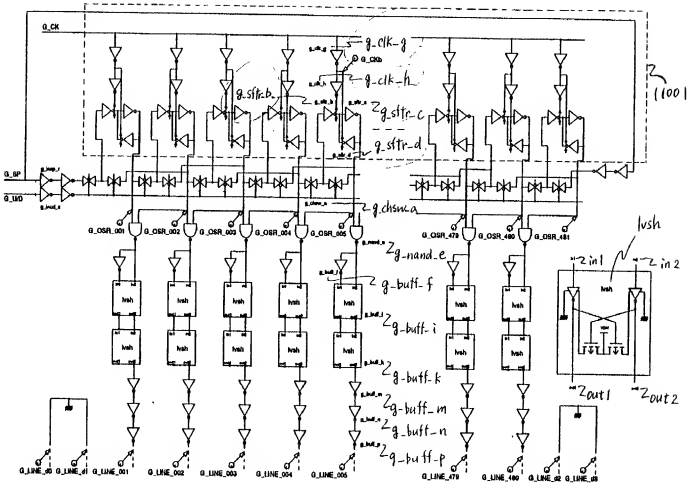


Fig. 11

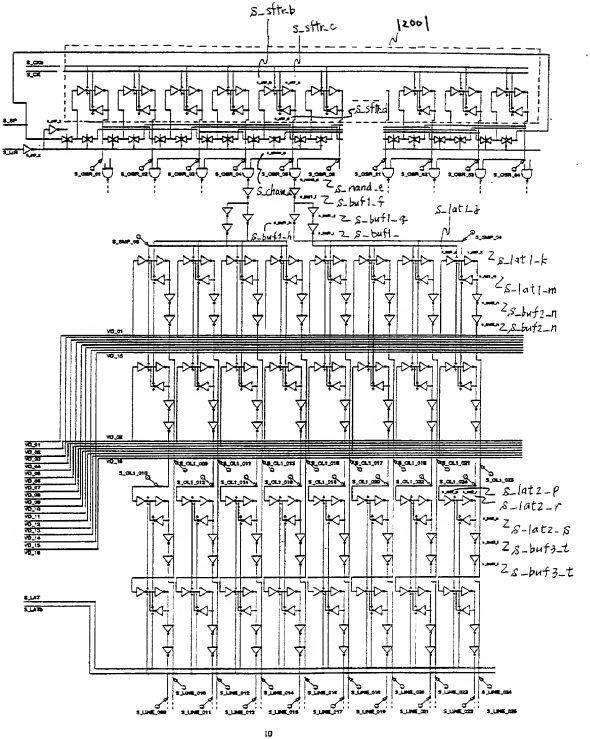


Fig. 12

Fig. 13A

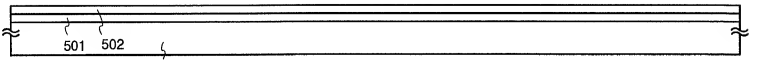


Fig. 13B

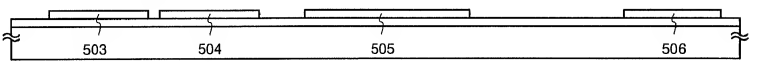


Fig. 13C

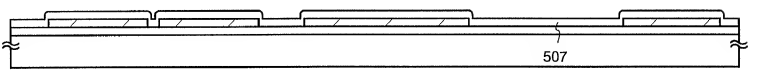


Fig. 13D

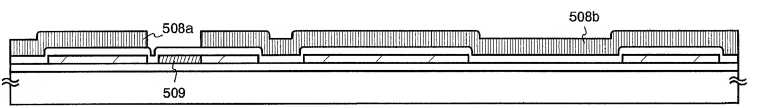


Fig. 13E

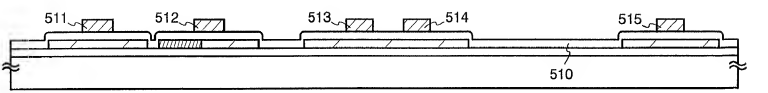


Fig. 14A

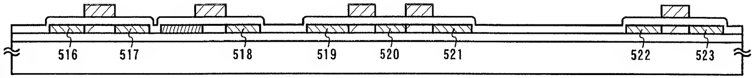


Fig. 14B

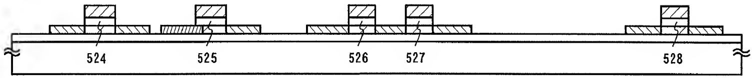


Fig. 14C

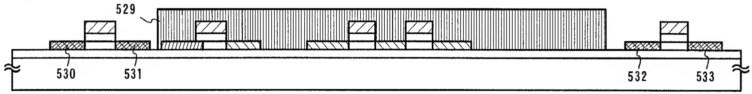


Fig. 14D

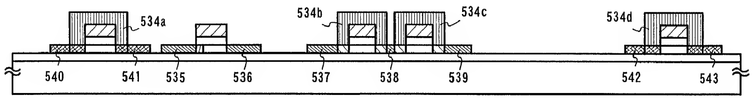


Fig. 14E

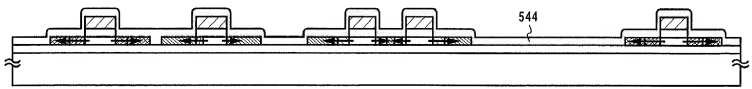


Fig. 15A

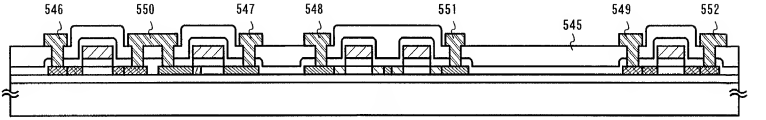


Fig. 15B

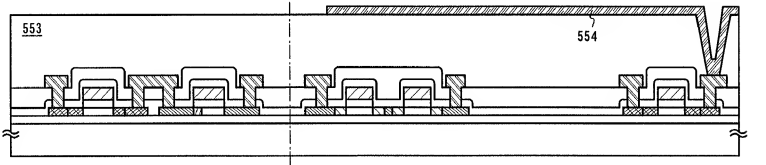
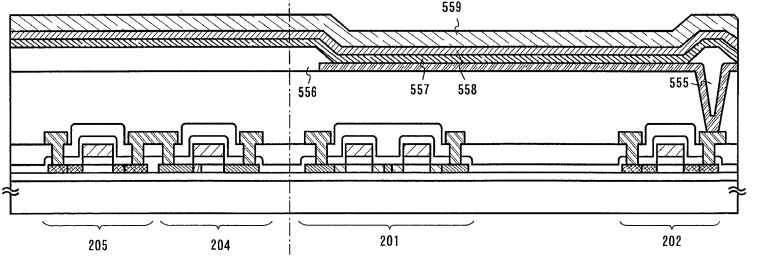


Fig. 15C



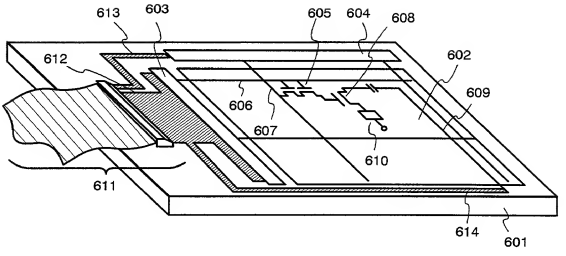


Fig. 16

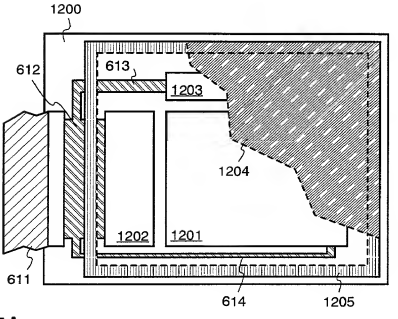


Fig. 17A

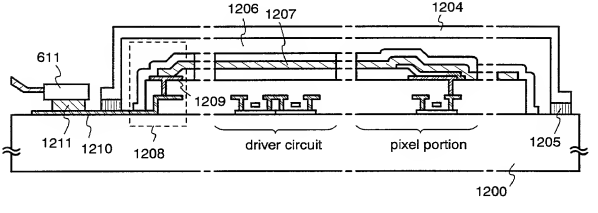


Fig. 17B

Fig. 18A

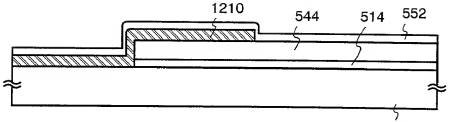


Fig. 18B

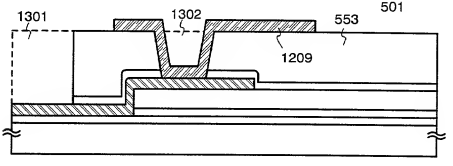
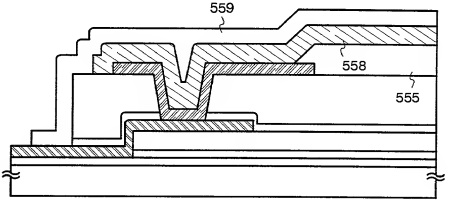


Fig. 18C



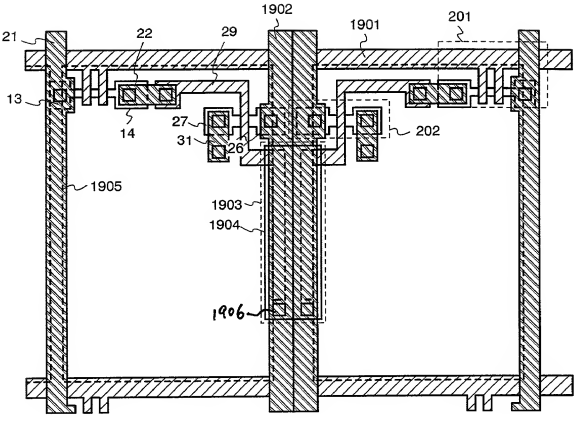


Fig. 19A

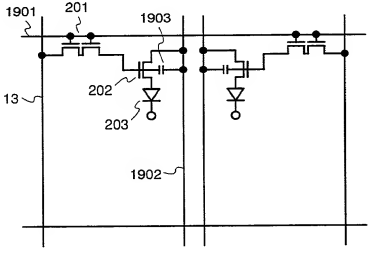


Fig. 19B

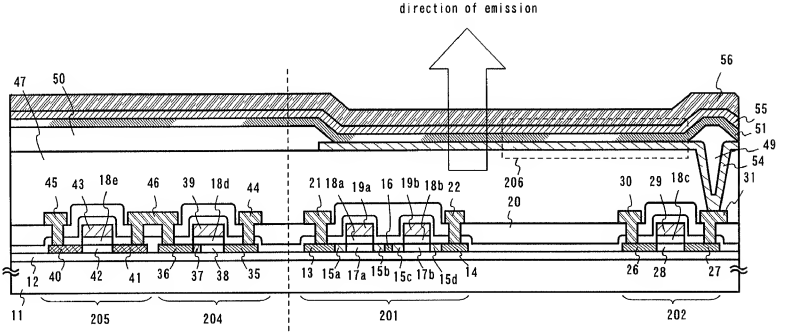
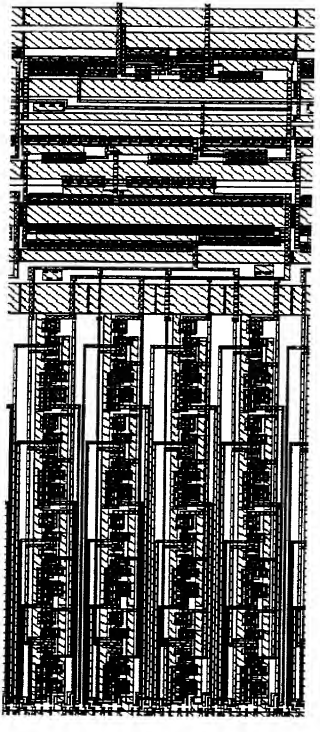

direction of emission
47
50
56
55
51
49
54
31
45
43
18e
46
39
18d
44
21
18a
19a
16
19b
18b
22
206
20
30
29
18c
12
40
42
41
36
37
38
35
13
15a
17a
15b
15c
17b
15d
14
26
28
27
11
205
204
201
202

Fig. 20



shift registor
(2601)

latch 1
(2602)

Fig. 21

Fig. 22A

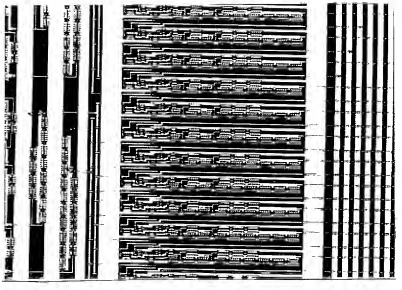
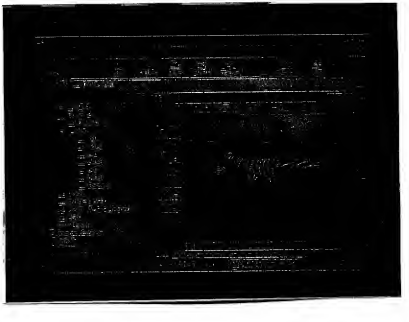


Fig. 22B



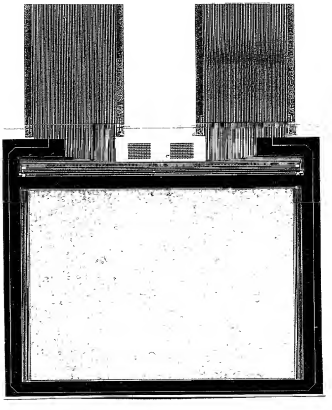
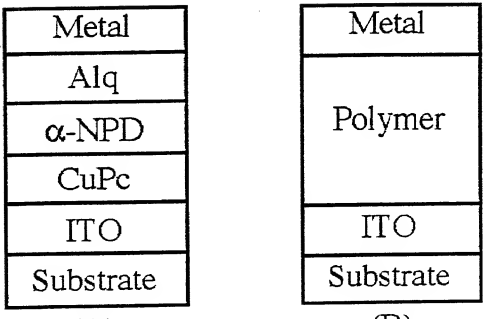
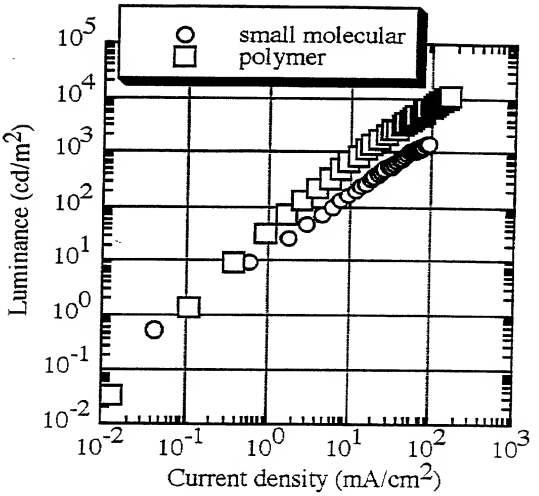


Fig. 23



Structures of OLED

Fig. 24



L-J characteristics for small molecular(open circle) and polymer(open square)

Fig. 25

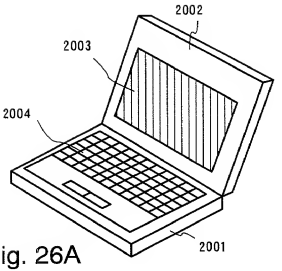


Fig. 26A

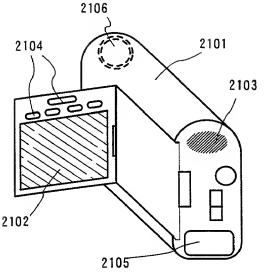


Fig. 26B

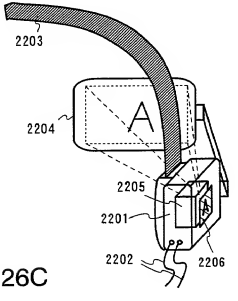


Fig. 26C

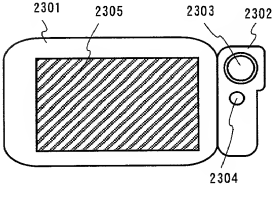


Fig. 26D

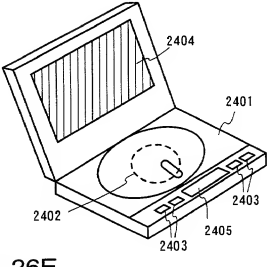


Fig. 26E

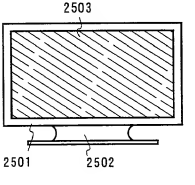


Fig. 26F

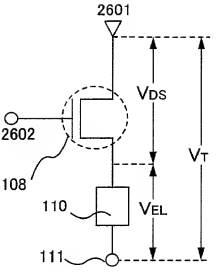


Fig. 27A

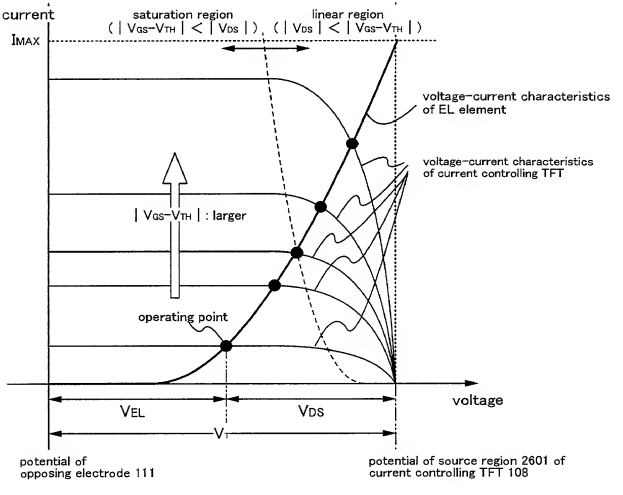


Fig. 27B

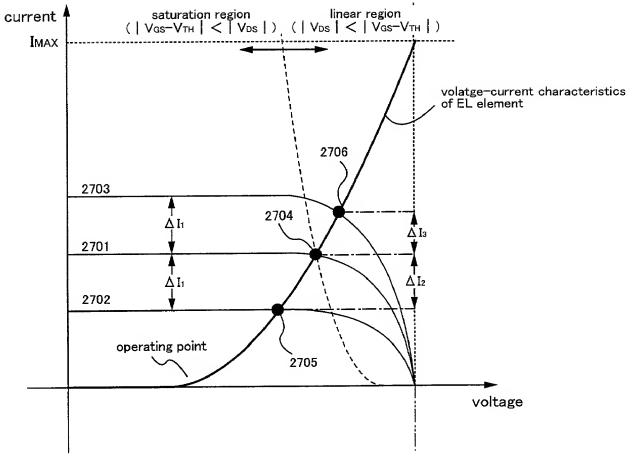

current
IMAX
saturation region
(| VGS−VTH | < | VDS |)
linear region
(| VDS | < | VGS−VTH |)
volatge−current characteristics of EL element
2706
2703
2704
2701
2702
ΔI1
ΔI1
ΔI3
ΔI2
operating point
2705
voltage

Fig. 28

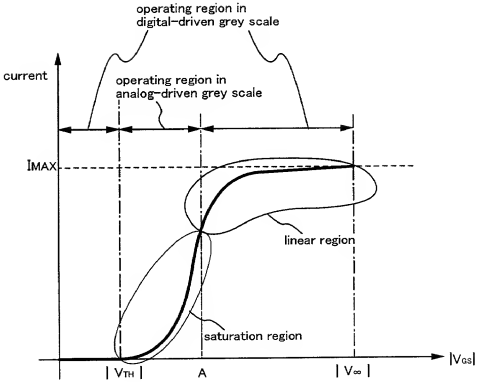

operating region in
digital-driven grey scale
current
operating region in
analog-driven grey scale
IMAX
linear region
saturation region
|VTH|
A
|V∞|
|VGS|

Fig. 29